

Appeal from a decision of the Wyoming State Office, Bureau of Land Management, increasing the annual rental for noncompetitive oil and gas lease W 085084.

Affirmed.

1. Oil and Gas Leases: Burden of Proof--Oil and Gas Leases: Known Geologic Structure

Delineation of a KGS recognizes the existence of a continuous entrapping structure, on some part of which there is production, or of numerous related, but nevertheless independent, stratigraphic or structural traps. A party challenging a determination that lands are within a KGS must either show that the producing structure does not underlie the land or affirmatively establish that the land involved is not productive from the structure in question. A determination by a Departmental technical expert that lands qualify for inclusion in a KGS will be upheld when it is not arbitrary and capricious and is supported by competent evidence.

2. Oil and Gas Leases: Known Geologic Structure

The fact that the boundary of a portion of a KGS is established based upon data from a limited number of wells does not mean that BLM errs in relying upon the information. When a KGS determination is challenged, the relevant questions concern the reasonableness of the inferences which have been made based upon well data and the extent to which BLM's conclusions concerning the geologic structure are supported or contradicted by the available information.

3. Oil and Gas Leases: Known Geologic Structure

The determination that land is within a KGS does not guarantee that it will be productive; it means only that, on the basis of geological evidence, the Department has determined there is a structure in which oil

or gas is trapped and there is production from a well on that structure. Land is included in the KGS when the geologic evidence indicates that the structure underlies the land, not on the basis of evidence that oil and gas is contained in the portion of the structure under the land.

APPEARANCES: A. D. Matchett, Frandy, Inc., Billings, Montana, for appellant; Lowell L. Madsen, Esq., Office of the Regional Solicitor, U.S. Department of the Interior, Denver, Colorado, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE IRWIN

Frandy, Inc., on behalf of Paul E. Pendergrass, 1/ has appealed a decision of the Wyoming State Office, Bureau of Land Management (BLM), dated September 19, 1986, increasing the amount of the yearly rental for nonproducing, noncompetitive oil and gas lease W 085084 due to inclusion of part of the land within the Washakie Basin Known Geologic Structure (KGS). The effect of BLM's decision is to increase the annual rental rate from \$1 per acre to \$2 per acre for the fifth year of the lease. The lease provides for an annual rental of \$3 per acre for the sixth and succeeding lease years. This rate is not increased by BLM's decision.

The Washakie Basin KGS is an extremely large stratigraphic KGS which includes portions of approximately 50 townships in the Washakie and Great Divide Basins of Sweetwater and Carbon Counties, Wyoming. Appellant's lease includes 4,002.33 acres, consisting of all of secs. 4, 6, and 30 and portions of nine other secs. in T. 19 N., R. 90 W., sixth principal meridian, Carbon County, Wyoming. Because the eastern boundary of the KGS crosses the township diagonally, we are concerned only with the leased lands within secs. 4, 6, 8, 10, 18, 20, and 30 that BLM determined are properly included within the KGS.

[1] A KGS is defined as "technically the trap in which an accumulation of oil and gas has been discovered by drilling and determined to be produc-tive, the limits of which include all acreage that is presumptively productive" 43 CFR 3100.0-5(l). Delineation of a KGS recognizes the existence of

1/ Practice before the Interior Board of Land Appeals is controlled by 43 CFR 1.3. In addition to representation by an attorney, an individual may practice before the Department in regard to a matter in which he represents, inter alia, himself, a family member, a partnership of which he is a member, and a corporation or association of which he is an officer or full time employee. 43 CFR 1.3(b)(3). An appeal brought by a person who does not fall within any of the categories of persons authorized to practice before the Department under 43 CFR 1.3 is subject to dismissal. Leonard J. Olheiser, 106 IBLA 214, 215 (1988). In this case, although the lease was issued to Pendergrass as an individual, see Henrikas Brazaitis, 107 IBLA 56 (1989), the Part B form, by which he applied to obtain the lease, disclosed that Frandy, Inc., is a party in interest. Thus, Frandy, Inc., is appearing on its own behalf as well as for the named appellant.

a continuous entrapping structure, on some part of which there is production, or of numerous related, but nevertheless independent, stratigraphic as well as structural traps. Thunderbird Oil Corp., 91 IBLA 195, 202 (1986), aff'd sub nom; Planet Corp. v. Hodel, Civ. No. 86-679 HB (D.N.M. May 6, 1987).

An appellant challenging a KGS determination must either show that the producing structure does not underlie the land or affirmatively establish that the land involved is not productive from the structure in question. Id. The law is settled that a party challenging a BLM determination that lands are within a KGS has the burden of establishing by a preponderance of the evidence that inclusion of the land is erroneous. Bender v. Clark, 744 F.2d 1424, 1429-30 (10th Cir. 1984); Carolyn J. McCutchin, 103 IBLA 1 (1988); Thunderbird Oil Corp., supra at 201.

The Secretary of the Interior has delegated the responsibility for determining the existence and extent of KGS's to his technical experts in the field. When these experts make a determination that lands qualify for inclusion in a KGS, the Secretary is entitled to rely upon their reasoned opinion. Thunderbird Oil Corp., supra at 202; Champlin Petroleum Co., 86 IBLA 37, 40 (1985). A determination by a Departmental technical expert will be upheld when it is not arbitrary and capricious and is supported by competent evidence. Thunderbird Oil Corp., supra; Lowell J. Simons, 104 IBLA 129, 131 (1988).

Appellant argues that BLM erred in determining that the leased land is properly included within the KGS because the six wells drilled in the township have been dry holes, are now plugged and abandoned, or are shut in as uneconomic. Appellant also states that the three wells drilled in T. 20 N., R. 90 W., to the north of the leased acreage, and the two wells drilled in T. 18 N., R. 90 W., to the south of the leased acreage, have been dry holes. Appellant states that the nearest production is 4 to 5 miles from his lease and contends that, due to "the sparse control and lack of current production near the acreage," BLM's decision is "unwarranted and unjustified."

BLM has filed an answer which includes a "geological report" responding to appellant's statement of reasons. BLM does not disagree about the status of the wells noted by appellant, but asserts that the wells drilled outside the boundary of the KGS have no bearing on its decision to include the leased acreage within the KGS. BLM states that both of the plugged and abandoned wells in secs. 16 and 17, T. 19 N., R. 20 W. had initial production, indicating that they penetrated reservoir sands. BLM also notes that the two wells in T. 20 N., R. 90 W. had gas shows. Upon request BLM has provided a copy of a portion of the isopach map for the Washakie Baskin KGS that includes the area of appellant's lease.

[2] While appellant is correct that only a limited number of wells have been drilled in the area of his lease, his argument is not persuasive because it fails to point to any error in BLM's interpretation of the information from the wells which have been drilled. The fact that the boundary of this portion of the KGS was established based upon data from

a limited number of wells does not mean that BLM erred in relying upon the information. Joy Goldschmidt, 107 IBLA 237, 241 (1989). When a KGS determination is challenged, the relevant questions concern the reasonableness of the inferences which have been made based upon well data and the extent to which BLM's conclusions concerning the geologic structure are supported or contradicted by the available information. Id.

Although BLM has not included any well data in the case file, the isopach map suggests that BLM relied heavily on the two plugged and abandoned wells to establish the boundary for the KGS in T. 19 N., R. 90 W. The zero isopach line showing the net pay limit for the Upper Almond reservoir runs between the two wells. The line defines the boundary of the presumptively productive formation as the limit of Upper Almond formation of 6 percent or greater porosity. Thus, the isopach map represents a determination by BLM that Upper Almond formation of 6 percent or greater porosity does not underlie the well in sec. 16, while the formation is present under the well in sec. 17. Appellant has not produced evidence showing that this determination is in error or that the lands he leases are not properly included within the KGS.

[3] Appellant's argument that there is no production in the vicinity of his lease misapprehends the nature of a KGS determination. As the Board has stated for many years: "The determination that land is within a KGS does not guarantee that the entire area is productive; it only shows that on the basis of geological evidence the Department has determined there is a structure in which oil or gas is trapped and there is production from a well on that structure." William T. Alexander, 21 IBLA 56, 61 (1975); see Sherbourne Partnership, 90 IBLA 130, 133 (1985); Angelina Holly Corp., 70 IBLA 294, 299 (1983), aff'd, 587 F. Supp 1152 (D.D.C. 1984). Land is placed within a KGS on the basis of criteria established by BLM based on portions of the structure from which production has been obtained. Land is included in the KGS when the geologic evidence indicates that the structure underlies the land, not on the basis of evidence that oil and gas is contained in the portion of the structure under the land. Thus, while land meeting the criteria may be productive, and can properly be included within the KGS as presumptively productive, the fact that land meets the criteria does not mean that it necessarily will be productive.

Similarly, the fact that a "dry hole" is found within a KGS does not, ipso facto, establish that it was error to include the area within the KGS. There are a variety of reasons a well may be deemed a "dry hole" incapable of production in paying quantities. Some involve economic considerations which are not relevant to the question of whether the land is properly included within a KGS. See Beard Oil Co., 99 IBLA 40, 47 (1987). Appellant's arguments do not suggest that BLM erred in determining that the structure underlies a portion of the lands he leases. 2/

2/ We note that the boundaries of the KGS were improperly located insofar as they include each 640-acre section touched by the zero contour line shown on the isopach map for the KGS. In Pamela S. Crocker-Davis, 94 IBLA 328, 332 (1986), the Board concluded that, absent some justification to show the

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision of the Wyoming State Office is affirmed.

Will A. Irwin
Administrative Judge

I concur:

Wm. Philip Horton
Chief Administrative Judge

fn. 2 (continued)

relationship between state-established spacing units and the concept of a KGS, BLM should include in a KGS only the smallest legal subdivision (quarter quarter section) traversed by the boundary of the structural or stratigraphic trap. Accord Charles J. Rydzewski, 105 IBLA 9 (1988); Ecological Engineering Systems, 104 IBLA 117, 121 (1988). Absent a justification showing that the spacing unit implies the presence of hydrocarbons, use of state spacing units to determine the boundaries of a KGS would appear to be based on administrative convenience rather than geologic information. Kathleen M. Blake, 96 IBLA 61, 75-76 (1987). Correcting this error, however, will not place all of appellant's leased lands outside the boundary of the KGS.